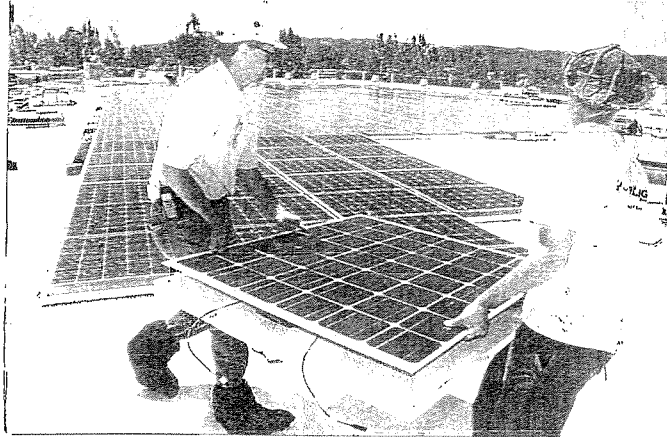


# TRI-VALLEY HERALD

June 13, 2001



JAY SOLMONSON — Staff  
Tyroan Hardy and Renee Solari help install a rooftop solar photovoltaic panel at Santa Rita county jail in Dublin on Tuesday.

## Nation's largest roof-mounted solar array shown off in Dublin

By Craig Kapitan  
STAFF WRITER

DUBLIN — With the energy crisis hitting home, Santa Rita county jail officials were almost at the point of requesting hundreds of stationary bikes hooked to generators in an effort to harness inmate power, Undersheriff Curtis Watson joked Tuesday.

Luckily for the inmates, Alameda County won't have to resort to such drastic measures.

Instead, county and jail officials unveiled the site's new roof-mounted solar array Tuesday. When the project is completed in July, it will produce up to 500 kilowatts of electricity at a time, making it the largest solar energy generator of its kind in the country.

That's enough energy to provide between 15 and 20 percent of the electricity needed to run the facility, which is the third largest jail in California.

Last year, energy bills for the 928,000 square-foot facility were about \$1 million. Before the project, costs were expected to reach \$1.5 million this year.

But once finished, the project will save Alameda County about \$300,000 in energy bills each year. At that rate, the installation is set to pay for itself in about seven years.

The total cost for the project, which also included re-roofing the buildings with an energy-conserving coating and installing a more efficient cooling system, was about \$4 million. But grants recently instituted by the California Energy Commission were able to reduce county costs by \$2.2 million.

"This system will save millions of dollars in

electrical costs over its lifespan," said Daniel Shugar, executive vice president of PowerLight Corp., which manufactures the panels.

The system is expected to last about 30 years.

During that time, the county will also save the equivalent of about 62,000 barrels of oil, said Alameda county General Services Agency Director Aki Nakato.

Although a cloudy day will substantially decrease production, the panels will produce the most energy when it is most needed — as the temperature starts rising. That's because the largest energy drainer at the facility is the ventilation fans.

In addition to the energy they capture, the cells also provide insulation to the building, saving further air conditioning costs.

Until recently, solar energy was scarcely used because of price considerations (just five years ago similar models cost twice as much), but the basic technology is not new.

"This is what has been up on the satellites," explained General Services Agency Energy Program Manager Matt Muniz, pointing to the glimmering jail rooftop. "NASA has used solar for 30 or 40 years. Now it's becoming more and more of a sure investment."

By July, about 4,700 panels will be installed on six buildings. But that's not all the county has planned for the expansive rooftop.

The real goal, Muniz said, is to capture three times the amount of solar energy that the current rooftop system is expected to provide. In order to do so, the county will have to apply for more state funding and cover the remaining four buildings of the jail.